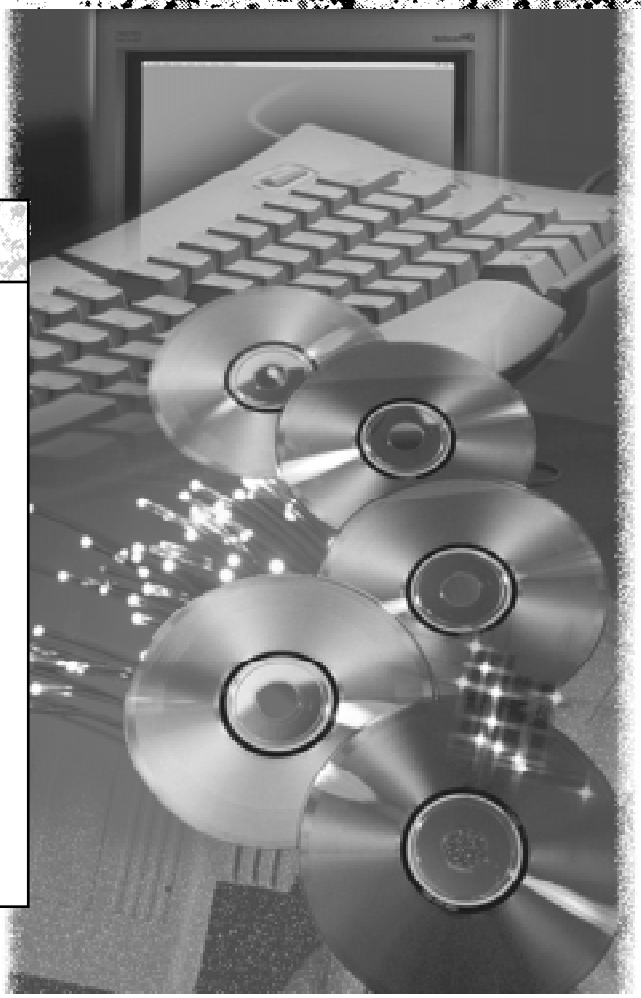
PROJECT HANFORD
MANAGEMENT CONTRACT

Information Resource Management

Strategic Plan



Inside

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Glossary of Terms

Automation – The use of information technology to improve project execution.

Data Warehouse – A database that serves as a central location for collating and storing data compiled from multiple sources and used for viewing, reporting, analysis, and management.

Enterprise Resource Planning (ERP) – Software products designed to be the vehicle for companies to control, monitor, and coordinate activities in all of their locations.

HLAN – Hanford Local Area Network.

HANDI – Hanford Data Integrator, a data warehouse which stores and displays commonly accessed PHMC information.

HANDI 2000 – A phased reengineering and software implementation of an Enterprise Resource Planning system to replace non-year 2000 compliant legacy systems, improve productivity and incorporate commercial business practices into Hanford.

Hanford Automation Team (HAT) – A multi-project and function team to establish IRM priorities for project automation.

Information Management – The planning, budgeting, manipulation, and control of information throughout its life cycle.

Information Resources – Both information and information technology.

Information Resources Management – The process of managing information resources to accomplish a mission. Encompasses both information itself and related resources (personnel, equipment, budget, information technology).

Information Technology – The hardware and software that processes information, regardless of the technology involved (e.g., telecommunications).

Intranet – The private network used for communications within the PHMC.

PHMC – Project Hanford Management Contract.

Project Information Manager (PIM) – The manager working for a project who is responsible for coordination and demand management for IRM activities and services.

Seat Management – Encompasses the management, operation, and maintenance of the desktop and its associated network infrastructure.

Software Engineering Institute (SEI) – A federally funded research and development center with a broad charter to address software engineering technology.

Year 2000 (Y2K) – Identification, assessment, and renovation of computers and systems that cannot process the year 2000 date properly.

Introduction

This IRM Strategic Plan is the top-level planning document for applying information management to achieve the U.S. Department of Energy (DOE) mission goals at the Hanford Site. It articulates the vision and commitment to a long-range strategic direction for information resource management (IRM) at the Site. It also provides a framework for current initiatives and a basis for discussion of technology directions.

Purpose

The plan is structured around the missions and information needs of the Project Hanford Management Contractor (PHMC) projects. It is intended to provide a basis for assessing the value of the resources required to support efficient and effective project execution.

The plan serves as a framework for developing specific IRM initiatives proposed to support the Hanford Site mission. The plan provides the basis for evaluating the effectiveness of ongoing activities and the use of information resources. It is consistent with important current initiatives such as HANDI 2000 (Enterprise Resource Planning software) and Year 2000. It includes strategies for a common operating environment, best commercial practices, and addresses planned retirement of Site Systems.

The Strategic Direction section states the overall IRM goals. Each goal has associated objectives. Strategies have been formulated for directing the efforts needed to accomplish the objectives. Although some strategies could be applied to more than one goal or objective, they were included only once in a logical location. The table on page 6 provides a high-level summary of goals, objectives, and strategies.

Execution

The Making It Happen section is a roadmap for the implementation efforts to follow. It identifies key activities that need to be accomplished next to achieve the goals stated in this plan.

This plan has strategies to support the goals stated in the *Hanford Strategic Plan* (http://www.hanford.gov/hsp/index.html): Manage cleanup as a project, optimize the Site infrastructure, enhance workforce effectiveness, and provide information to improve the decision-making process. This plan also supports goals stated in the DOE-Headquarters' *Information Management Strategic Plan* (http://cio.doe.gov/): Involve customers in IRM planning, develop data administration processes, and provide tools to simplify accessing and sharing information. This plan includes strategies using the management and integration process (M&I) depicted in the *Management and Integration Plan* (http://docs.rl.gov/phpp/plans/index.asp): Foster information resource planning, move to a common operating environment, and achieve best in class shared applications across the Site.

Goals

The strategies outlined in this plan are rooted in three overarching goals:

- *Support the projects as a mission partner* by providing them with technology to help them improve their business processes and worker productivity in accomplishing missions.
- *Provide cost-competitive information infrastructure and services* by improving technology and work processes and investing in approaches that are supported by an approved business case.
- *Improve IRM management processes* by making cultural and organizational changes to align more closely with the projects and managing contractor organizations, identifying clear roles and responsibilities for IRM functions, projects, and initiatives, and by implementing systems engineering practices in IRM decision-making.

Mission and Vision

The PHMC IRM mission states the long-term vision of the organization in terms of what it wants to be and who it serves. It is the foundation on which the IRM leadership has established its business objectives and formulated strategies to help the PHMC accomplish its mission.

IRM Mission

The IRM mission is to create an information environment that cost-competitively delivers the right data and information of known quality in a usable form to the people who need it, where they need it, and when they need it.

To achieve this mission, IRM is focusing on strategies for partnerships and improved processes.

Partnerships with Projects and DOE

IRM seeks out and cultivates partnerships with projects, DOE, and customers to promote a shared responsibility for producing results—better, cheaper, faster, and safer.

Improved Processes

IRM uses performance measurement tools, systems engineering practices, project management execution, modern techniques, and the best commercial practices to deliver quality services. In partnership with Hanford Site operational entities, IRM demonstrates continuous process improvement and contributes to improved mission performance.

IRM Structure

The scope of IRM infrastructure at the Hanford Site consists of the computing and software applications environment, telecommunications and network, document control and records management, and media services.

IRM Vision

IRM will create, operate, implement, and maintain timely and cost-competitive resources to meet the information needs of the Hanford Site.

Critical Success Factors

Achieving the IRM mission and vision depends on the following essential factors.

- Senior management leadership, commitment, and advocacy
- Allocation of resources tied to the site mission and based on benefit and cost
- Skilled and empowered staff
- Sound implementation planning and execution
- Customer commitment and ownership
- Cost-competitive services
- Common operating environment
- Commercial business practices
- Measurement and management of key services
- Preferentially use commercial off-the-shelf (COTS) software.

Guiding Principles

In formulating this Strategic Plan five guiding principles were applied:

- *IRM activities must be aligned with the Hanford Site mission.*

  IRM provides services to support the completion of the Hanford Site mission. IRM will actively communicate with the projects and programs to verify that our resources are supporting accomplishment of the Hanford Site mission.

- *Information must be shared between projects.*

  The Project Hanford Management Contract is being executed by several different organizations. Each organization performs its scope of work using unique expertise and methods. To successfully coordinate work between projects, common operating environments and tools must exist for sharing information. While all project information does not have to be in a common format, coordination is essential in key areas. IRM has the role of enabling the coordination of interproject communication. Subject matter experts identify the information to be shared; IRM provides the standards and tools for sharing it.

- *Common business solutions must be used where possible.*

  All projects and programs have similar work processes that can be performed using the same IRM resources. Applying a single solu tion across projects when possible eliminates redundant costs.

- *Tools must be provided to enhance project management and execution.*

  To control the PHMC work scope, information from all of the projects must be available in a consistent format at multiple levels of management. Tools for projects to manage information must be easy to use and provide the right information at the right time to enable better decision making.

- *The value of IRM services provided to the customer can be increased by improving the cost-competitiveness of those services.*

  Each IRM service will be measured by its ability to deliver value to the customer. The Booz-Allen & Hamilton benchmarking study performed in 1997 identifies a number of potential opportun ities to enhance the way IRM services are provided. The opportunities identified in this study will be evaluated for implementation where appropriate.

Strategic Direction

The following sections discuss objectives and strategies supporting the three overarching goals for IRM at the Hanford Site.

GOAL 1

Support Projects as a Mission Partner

The PHMC's IRM team provides services that support the Hanford Site mission. IRM is a centralized service organization that performs some functions in a decentralized manner. This structure facilitates sharing resources and the coordination of interproject issues. The fundamental purpose of IRM is to support the Project Hanford Management Contract Team by providing information and automation services that support their mission.

Objective 1.1 – Meet the information needs of the Project Hanford Management Contract Team.
The strategies discussed for this objective are based on the needs identified by the Project Information Requirements Interview process conducted in 1997.

Strategy 1.1.1 – Provide a simple user interface to integrated Site and Project-specific data.
The projects consistently indicated a need to have easier and better access to data, information, and reference material (e.g., regulatory, vendor information, other DOE Site information, etc.). Project concerns included ensuring the accuracy and consistency of information, and eliminating redundancy. Solutions include a broader spectrum of data to be included in HANDI (the data warehouse), moving the various HLAN and other information sources (e.g., HANInfo, Soft Reporting, etc.) to HANDI and the Hanford intranet, and providing an information locator service for documents, photographs, presentations, etc.

Strategy 1.1.2 – Evaluate the feasibility of cleaning up and/or automating the Hanford Site key historical information.
The projects spend considerable time finding, reconciling, and, in some cases, updating Hanford Site historical data (e.g., drawings, design changes, operating records, documents, etc.) before they can do many tasks. Because of its one-time nature, this is an inefficient process. A multi-project team will be formed to establish criteria for determining when information is needed often enough to justify its clean up and transfer into an automated data repository for improving this work process.

Strategy 1.1.3 – Integrate systems, eliminate redundant data, and provide data security.
The projects indicated a problem with the same data being stored in multiple systems, and would like to see fewer, better integrated systems. There are areas such as finance and supply, facility management, sampling and characterization, work management, and other cross-project functions that present significant opportunities to simplify and integrate systems. Require IRM managers to ensure functional security requirements are designed and implemented to protect information from unauthorized alteration, destruction, and access.

Strategy 1.1.4 – Consolidate the common information systems being used by the projects.
Many of the functions performed by the projects are similar (e.g., work management, facility management, sampling, surveillance, process control, material management, administrative functions, action tracking, etc.). A process will be implemented to show the functions and supporting information systems being used by each project. The goal of the process is to simplify and improve the systems being used, and reduce redundancy by identifying areas for potential Sitewide or shared best-in-class solutions.

Objective 1.2 – Increase and promote effective IRM interaction with the Project Hanford Management Contract Team.
Methods need to be established to provide a close relationship between the PHMC's information requirements and IRM's plans and capabilities.

Strategy 1.2.1 – Establish Project Information Manager (PIM) role to improve information resource planning, implementation. and support for projects.
Each project will have a key management position assigned for managing the demand for IRM services. This position will be called the project information manager (PIM) and will be a step in a project management career. The PIM will serve as the project's advocate in determining information resource needs and priorities. This individual will be responsible for following the project plans through implementation and knowing what IRM support is required. The PIM will interface with IRM and develop plans for delivering information resources to the project.

Strategy 1.2.2 – Include PIMs in information resource and automation planning for projects.
The PIM ensures that the needs of the project he or she represents are adequately reflected in the IRM planning process at the Hanford Site. The PIM is the primary

advocate for IRM solutions to Project needs. The PIM will serve as the project's representative to the Hanford Automation Team. See Figure 1.

Objective 1.3 – Identify and implement specific project initiatives to improve work processes and information systems.

The Project Information Requirements Interview process identified the need for new capabilities to assist the projects in improving their processes for accomplishing work effectively. These capabilities and others related to providing information in a more timely manner will be addressed as potential new information system initiatives.

Strategy 1.3.1 – Support the projects in improving their work processes and information systems by providing them information that they currently either are not getting or that they need to get faster or in a better format.

The Project Information Requirements Interview process identified deficient work processes and information systems that need improvement. This included systems for providing information that the projects currently either are not getting or are not getting fast enough or in a usable format. IRM will work with the PIMs to identify, budget, and rank proposed initiatives that make good business sense based on cost-benefit analysis.

Strategy 1.3.2 – Provide an integrated financial, supply, and work management system.

The system will serve several purposes. First, it will provide, in near real time, the project cost management functionality required by the users of the existing financial, supply, and work-management systems. Second, it will enable the elimination of mainframe support costs by removing the major applications from that platform. Third, it will reduce application development and support costs by taking advantage of commercial-off-the-shelf systems (COTS). This is a major step toward HANDI 2000 ERP.

Strategy 1.3.3 – Conduct frequent interviews with project leaders to assess IRM project support effectiveness and elevate opportunities for improvement.

The intent is to continue the survey processes initiated for developing information supporting the strategic plan. The interviews also will provide a means to obtain feedback on the effectiveness of the PIM process.

Objective 1.4 – Distribute and support project performance measures and metrics.

Project performance measures and metrics must be collected and measured to satisfy project missions. Better means are needed to make this information readily available to management.

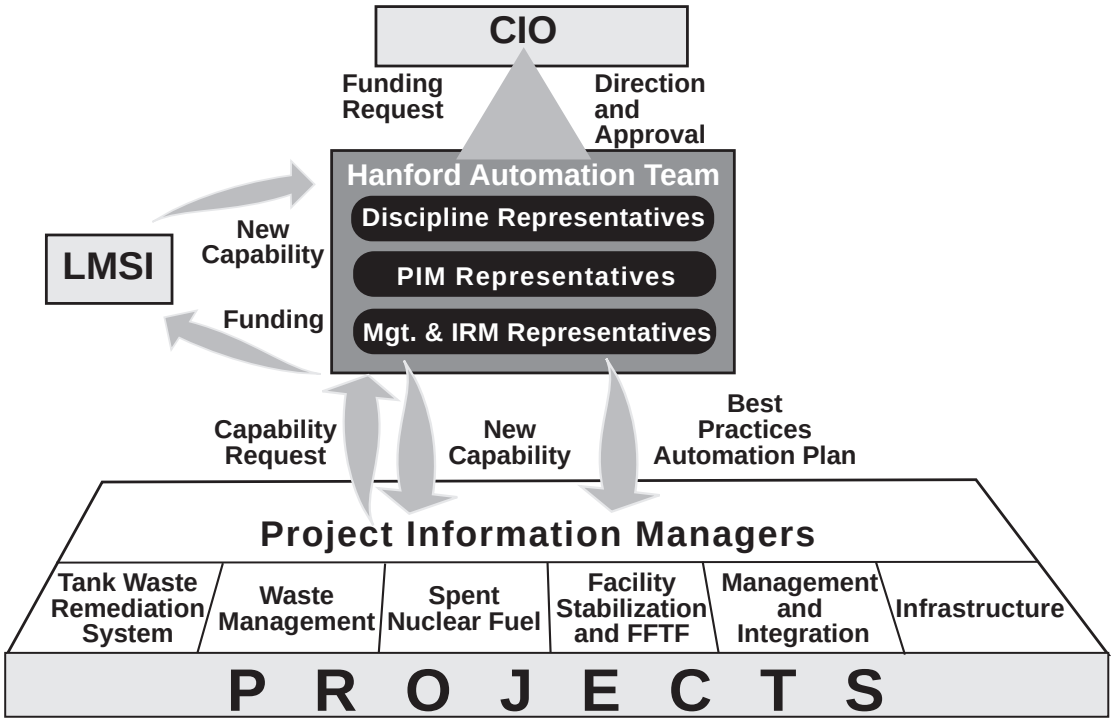

Figure 1. The PIM representatives are valuable members of the Hanford Automation Team ensuring IRM solutions meet their projects needs.

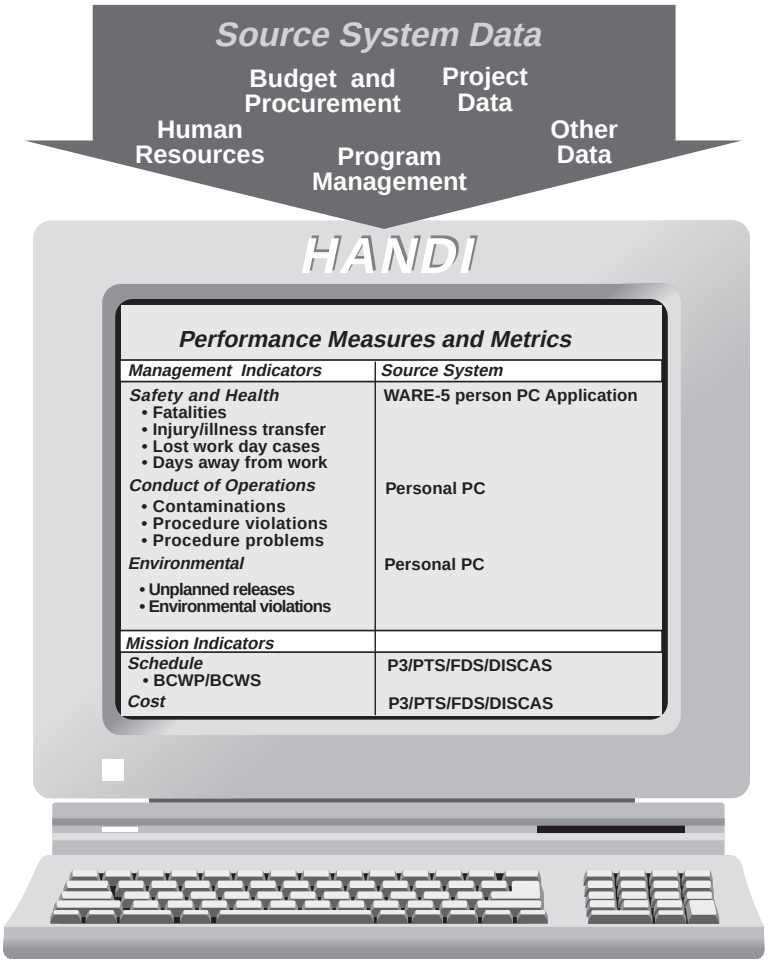

Figure 2. HANDI will display the Hanford Site performance measures and metrics. IRM will assist in automating the data roll-up process from the source systems to HANDI.

Strategy 1.4.1 – Assist in the collection and integration of data for the Sitewide performance measures and metrics.

In conjunction with the Fluor Daniel Hanford, Inc., Site Planning and Integration organization, IRM will support collecting information on the performance measures (management and mission indicators) that indicates mission success at the Hanford Site (Figure 2). IRM will work with the projects and managing contractor organizations to determine which measures will be automated to improve data integrity and consistency and minimize collection costs.

Strategy 1.4.2 – Provide tools for Sitewide access to project performance measures and metrics.

Once performance measures and metrics are identified, IRM will help put in place methods of gathering this information. Where appropriate, HANDI will be the tool of choice for delivering this information. Other methods, such as the Hanford Intranet, also will be used when they deliver information more effectively.

GOAL 2

Provide Cost-Competitive Information Infrastructure and Services

The information infrastructure and services are made up of the software, hardware, and support services staff that combine to deliver information to the end user. The hardware components include servers, workstations, cabling, routers, hubs, concentrators, telephones, radios, and pagers. The software is made up of specialized applications, common business applications, and operating systems. Support services require a trained and skilled staff to perform the activities needed to make the hardware and software deliver the product to the customer. The infrastructure's capability level will be based on achieving a fitness for the intended purpose and a common operating environment.

▶Application Development and Maintenance

Objective 2.1 – Provide high-quality, cost-competitive information system services and solutions.
Services and solutions for a broad spectrum of business, engineering, and scientific areas are needed to meet the operational, control, reporting, and business requirements of the projects. Reducing the life-cycle costs of applications through package-enabled reengineering based on commercial off-the-shelf (COTS) packages, associated work processes, and the retirement of customized legacy systems is needed.

Strategy 2.1.1 – Use commercial products that meet application requirements when available and minimize custom development.
Establish a preference for using integrated COTS products and work processes. Developing and supporting customized applications will be considered as a third choice after use of COTS and reuse of applications from/with other DOE Sites. Web-enabled COTS products will be selected when available. The standard desktop applications will be COTS products. Use of COTS reduces the continuing maintenance costs and the need to retain personnel with product-specific skills.

Strategy 2.1.2 – Achieve application and system Year 2000 (Y2K) compliance.
The Year 2000 initiative will be continued to ensure that essential functions at the Hanford Site are not interrupted because of data-handling problems. The process for achieving Year 2000 compliance includes inventorying, assessing, prioritizing, and remediating or eliminating systems. This initiative also will serve as the basis for reducing redundant or unneeded applications and equipment.

Strategy 2.1.3 – Establish a process for retiring applications that are duplicated or no longer used.
A process needs to be created and publicized to allow for the orderly eliminating of unneeded applications. The process will ensure that applications get reviewed for retirement periodically.

Strategy 2.1.4 – Improve software project management capabilities to reduce risk in development and implementation activities.
The existing *Software Practices* will be revised and include Software Engineering Institute (SEI) criteria where appropriate and allow for the use of modern software development techniques. Include the requirement for an approved business case, including a full life cycle analysis. Check points will be added to give management specific decision-making points during the process. Regular brief project status meetings will be implemented and will include review of metrics. All IRM managed development activity at the Site will adhere to the revised practices.

Strategy 2.1.5 – Define data interface standards for Sitewide information systems.
IRM will create, manage, and disseminate standards to ensure data consistency across information systems for necessary shared Hanford Site data.

Strategy 2.1.6 – Examine Intranet and Internet accessibility for software applications.
The information explosion on the Internet, combined with the ease of use of world wide web applications, provides IRM opportunities to improve applications delivery. IRM and project professionals will jointly define requirements for Intranet and Internet delivery systems.

▶Mainframe Computer/ Enterprise Server

Objective 2.2 – Eliminate the need for mainframe/ enterprise server computing capability.
The cost of operating the mainframe computer significantly exceeds that of best practices organizations. The major reason is that the scale of operations being conducted is too small to achieve the necessary level of efficiency. This situation is expected to become worse with time because requirements and applications for the equipment will be eliminated.

Strategy 2.2.1 – Move mainframe business applications to COTS client-server solutions.
Implementation of HANDI 2000 for the finance and supply systems will eliminate many of the systems used on the main frame. COTS replacements for some other applications also may be available.

Strategy 2.2.2 – Retire, outsource, or rehost the remaining mainframe applications.
Work with the customers who use these applications to determine their disposition. Funding for the disposition and operation of the applications is likely to be an issue requiring resolution.

▶Desktop

Objective 2.3 – Provide effective desktop support consistent with applications software requirements.
The current desktop configuration level needs to be updated to provide the capability to run new software packages where required to support project missions. The intent is to move to a common operating environment and use commercially proven technology.

Strategy 2.3.1 – Establish a Sitewide standard configuration for the desktop.
A standard configuration will reduce the variety in resource skills needed to support the desktop capability and is consistent with achieving a common operating

environment. It will allow for Sitewide purchasing of hardware and software, licensing, and vendor maintenance. A tiered set of capabilities within the standard configuration will be established to reflect the need for different levels of capability among end-users.

Strategy 2.3.2 – Implement "seat management" concepts.
These concepts allow for the delivery and maintenance of an integrated desktop configuration to the end-user. The configuration will include the workstation, standard applications packages, and specialized capabilities required by the user mission. The desktop will be managed as a resource to produce a level of needed service, owned, maintained, and refreshed by the provider at a specified price.

Strategy 2.3.3 – Establish an appropriate basis for desktop upgrade approach.
The desktop upgrade approach will be based on fitness to accomplish the needed user mission and long-term reduction in maintenance and personnel support costs. Products no longer supported by the vendor will be replaced.

▶Telecommunications and Network

Objective 2.4 – Provide a flexible communications capability for use in satisfying Sitewide requirements.
The variation in projects' needs for communications capabilities, including the data network, requires the implementation of flexible approaches that can accommodate the changes that will be experienced as the Site mission progresses.

Strategy 2.4.1 – Develop a communications network architecture that establishes a desired direction for future capability levels, consolidation, and equipment upgrade.
Using of the existing baseline and planning the future architectural direction will serve as the basis to support the decisions required in the future. Flexibility to meet changing needs is desired. Some equipment requires replacement because of increasing support costs, vendor termination of support, regulatory change, or Year 2000 compliance.

Strategy 2.4.2 – Develop a transition approach for radio frequency change.
Federal Regulations require radio operations on existing wide-band frequencies must be eliminated. Alternatives to the transition to new frequencies will be evaluated to satisfy the radio requirements including the use of wireless phones.

Objective 2.5 – Provide Sitewide computation and file services supporting applications and data management needs.
The requirement to provide computation services and information management for end-users is expected to continue to grow. The desired approach is to implement a common server operating environment to accommodate this growth efficiently and provide for network-based services including mail, intranet, and internet. Centralizing these services will allow for effective maintenance, necessary data back-up, and efficient administration.

Strategy 2.5.1 – Encourage migration to an open client-server architecture as preferred IRM direction.
This approach will include hardware servers and applications designed to operate in a client-server environment, supports the vision of easy access to information of all types from any location, and provides efficient support for applications used in distributed or central operations. This allows us to implement a Web browser approach to information access. The architectural requirements also present numerous possibilities for reducing support levels through automated tools for application distribution and upgrade, information back-up and recovery, and remote system management.

Strategy 2.5.2 – Consolidate and centralize support for midrange processors.
Consolidating existing processors will provide better use, security, administration, and reliability. Centralized support will allow for reduction of support levels.

Strategy 2.5.3 – Select and publish standards for computer and data storage hardware and software.
This approach provides procurement- and maintenance-cost-saving potential. It provides for reducing the different skill requirements necessary for system administration. The intent will be to structure this set of products to create a common operating environment and accommodate the requirements of various levels of application and file management needs.

Objective 2.6 – Provide cost-competitive, reliable telephone service.
The future cost of upgrading the existing switch to Year 2000 compliance and the requirement for continuing reduction in the levels of telephone support mandates an evaluation of the several approaches to providing telephone service.

Strategy 2.6.1 – Determine and implement the most cost-competitive and reliable way to provide telephone service.

Develop a technical decision analysis to support the disposition of the switch. Multiple options need to be evaluated. The options include: Telephone service outsourced on a unit-cost basis allowing for disposition of the switch, the switch upgraded to be Year 2000 compliant and telephone service outsourced at a date when substantial reductions in requirements occur, the service privatized, or no change. Providing voice and data technical support will be included in the evaluation.

▶Document Control, Records Management, and Media Services

Objective 2.7 – Provide cost-competitive document control, records management, and media management services and solutions.

The services will ensure that the records of Project Hanford activities are systematically captured, readily accessible, and sufficient to adequately document the management and accountability of PHMC activities and protect the legal rights of the Federal Government and PHMC contractors.

Strategy 2.7.1 – Establish an electronic records program.

An increasing percentage of PHMC records is stored electronically. A proactive program will be implemented to capture records earlier in their life cycle, use COTS solutions for imaging and document management, and improve the archival and disposition processes. The system will provide easier access to and better security for records and meet configuration management needs.

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Strategy 2.7.2 – Improve document control and records management awareness and processes.

The automation and streamlining of these processes will be continued and the associated databases consolidated.

Strategy 2.7.3 – Keep Media Services responsive to customer needs.

Commodity services will be moved into the user community where possible, and process standards and user guides will be enforced. Low-volume services requiring high investment will be outsourced, specialized services will be retained in house.

GOAL 3

Improve IRM Management Processes

The scope of the Project Hanford Management Contract provides a challenge in the management of the resources required to support the IRM needs of the varied projects. Techniques are needed that will result in coordination between the projects. To accomplish the Hanford Site mission, information must be shared. To successfully control IRM costs, IRM resources to provide that information must be shared.

Objective 3.1 – Institute effective IRM planning and investment process.

The projects indicated in the Project Information Requirements Interview process that IRM planning was ineffective and too time consuming. Approaches to improve the coordination of planning with the projects need to be initiated.

Strategy 3.1.1 – Establish an information systems baseline for the PHMC.

The baseline consists of the infrastructure (computers, desktop systems, communications, etc.), applications and process (development processes, operating procedures, etc.) elements. The baseline will provide a starting point for planning future initiatives and setting priorities. The starting point for the baseline is the applications and infrastructure information gathered for the Year 2000 effort.

Strategy 3.1.2 – Establish a policy for separating and collaborating automation initiative funding between projects.

A policy is needed to deal with the funding and budgeting of IRM initiatives that support multiple projects or are to be used Sitewide. The policy will establish the funding responsibilities of each group and ensure that provisions for training, hardware upgrades, installation charges, and ongoing maintenance are included.

Strategy 3.1.3 – Establish the Hanford Automation Team (HAT).

Team members will include PIMs, discipline representatives, and representatives from management and IRM. The HAT will be responsible for facilitating the development of best practices around applications and work processes that then will be used to eliminate redundant systems and increase operational consistency across projects. It will establish priorities for IRM initiatives based on benefits to mission activities. See Figure 1.

Objective 3.2 – Improve performance measurement of IRM services.

To know the value of IRM services, specific metrics must be established, monitored, and used as IRM measurements.

Strategy 3.2.1 – Use a Business Case Analysis based on costs and benefits for IRM projects.

Before spending significant resources on IRM projects, a cost-benefit analysis will be performed. This analysis will be adjustable in scope to reflect the expected size and cost of the project and include full life-cycle analysis. Large projects require formal studies to define the costs, benefits, and methods of measuring both. Small projects have similar requirements, but the scope of the cost-benefit analysis will be adjusted accordingly. The requirement for this analysis will be included in the revised IRM project management methodology.

Strategy 3.2.2 – Conduct frequent end-user surveys and sampling to assess user satisfaction and track opportunities for improvement.

The Project Information Requirements Interview process and a computer user survey were conducted in November and December of 1997. These processes will be streamlined for more effective communication of user satisfaction and opportunities for improvement.

Strategy 3.2.3 – Conduct IRM benchmarking studies.

The initial IRM benchmarking study of PHMC IRM services was conducted in 1997. This study compared PHMC IRM performance against the best practices of commercial organizations. This method of measurement will be used regularly to determine progress in the delivery of excellent value. A process needs to be developed to track and report progress.

Objective 3.3 – Encourage cultural and organizational changes that result in desired behavioral changes.

The Project Hanford Management Team uses a project approach to planning, budgeting, and executing the work. Each project is executed as a specific scope of work, yet is integrated with the overall Hanford Site mission. An element of project integration is the recognition of agreements and commitments that have been made by the DOE, Richland Operations Office as well as by each contractor. The proper cultural and organizational environment will ensure that projects are motivated to make decisions that support the common mission. IRM will make organizational changes to improve interproject communication. Incentives will be developed to motivate sound business decisions that honor all existing commitments.

Strategy 3.3.1 – Raise the awareness of the need for integration and consistency across IRM project support activities.

Duplication of IRM services between projects causes higher aggregate costs for the Project Hanford Management Contractors. IRM will work closely with the managing contractor's Project Direction organization and the PIMs to communicate the benefits of consistent and integrated IRM services, leading to more informed decisions.

Strategy 3.3.2 – Establish a unit-pricing structure for infrastructure services with incentives for users to manage demand.

A unit pricing structure is needed to allow users to assess their resource requirements on a business basis. The existing pools for allocating costs for infrastructure appear to provide incentives for undesirable behavior. The price to users is not established at a level that will allow the user to choose the level of service he or she desires. The result is that users simply use all the available services without regard to price. Demand rises to the level of availability.

Strategy 3.3.3 – Projectize IRM initiatives.

IRM initiatives will be planned and executed using proven project management principles.

Objective 3.4 – Apply systems engineering principles and practices to IRM management.

The Project Hanford Management Contract requires a systems approach as a basis for decision making. Systems engineering tools and methodologies provide a defensible, traceable basis for IRM decisions.

Strategy 3.4.1 – Tie the IRM baseline to the mission through Site systems engineering data.

Systems engineering models will be developed to show dynamic relationships between IRM service levels and project missions. Project participation in data collection and design of the models will be jointly developed with IRM and SE professionals.

Strategy 3.4.2 – Use systems engineering tools and techniques to support IRM decision making.

The project management approach to IRM will be further enhanced by using additional systems engineering tools or techniques where appropriate. These include trade studies, alternatives analysis, Life Cycle Cost functional analysis, and Value Engineering. These structured practices will be used when projects and IRM professionals require support for defensible, traceable decisions.

Making It Happen

The IRM Strategic Plan is a statement of goals and strategies, that can be achieved only if the necessary resources are available. As a result, the plan is a roadmap for the deployment of technology investments and information management approaches. It must be supported by business case analyses, innovative ideas, and practical implementation methods.

Review and Update

The Strategic Plan defines a relatively long-range direction for IRM activities at the Hanford Site. The project goal (GOAL 1) and objectives identified in this plan provide a set of directions for strategies designed to achieve improved business processes and support successful accomplishment of the Hanford Site mission. The IRM infrastructure goal (GOAL 2) and objectives are oriented toward maximizing the cost-competitiveness, level of service, return on investment, and overall performance of the infrastructure supporting the projects. The IRM management process goal (GOAL 3) and objectives focus on making the cultural and organizational changes required for an effective Sitewide IRM program. These goals, objectives, and strategies will be reviewed and updated periodically in response to changing program needs and advancing technology. The Strategic Plan will be reviewed yearly and updated when needed.

Implementation Documents

The IRM Strategic Plan will be supplemented by other documents appropriate for achieving the goals. A document tree is envisioned to provide the structure for the implementation details of the IRM Strategic Plan. The document suite will consist of plans including the IRM plan, annual work plan, business case documents, and implementation plans. It includes requirements and design documents used as a system architecture and data architecture. Support documents include standards documents, applications inventory, and end-user profiles.

Implementation Approach

The first steps in implementing this IRM Strategic Plan involve communicating the plan and identifying initiatives consistent with the strategies defined here. These initiatives include those already under way. The identification process needs to specifically involve the Project Hanford Management Team and focus on their identified needs for information. Once the initiatives have been identified, a business case evaluation must be conducted and the initiatives prioritized. An implementation plan will be developed to detail the approach and schedule for implementing initiatives that are approved and funded.

Future Directions

The objectives and strategies outlined in this plan, although some are relatively long range in scope, are not intended to project a vision of what capabilities information technology advances might provide in the future. However the overall strategic directions indicated here likely will still apply. The basic needs will continue to be driven by the mission requirements of the projects. Their specific requirements will change, but providing up-to-date, usable, and easily accessible information will continue to be the overall goal. Expected improvements in mobile computing and wireless networks will enhance the capabilities of individual workers to use information at the job site, be assured of up to date data, and obtain access to reference material as it is needed. The widespread use of network browser technology will allow end-users access to information without the need to understand how software applications operate and with minimal training. The capability to automate routine administrative processes will improve to the point where administrative functions can be accomplished in significantly reduced periods and with minimal staff.

No matter where information management advances lead, maximizing the value of information resources to support the Hanford Site mission will still be necessary. The success of the strategic directions outlined in this plan will best be judged in the future by how successfully the projects accomplish their missions.